Assignment 3

Textbook Assignment: "Ship Compartmentation and Watertight IntegritY, Fundamentals of Firefighting, Fire fighting Equipment and Systems;" pages 3-21 through 5-5

Learning Objective: Point out procedures used in checking watertight integrity.

3-1. A flooded compartment will probably leak if it has which of the following weaknesses?

1. Loose rivet heads
2. Poorly talked plate laps or stiffeners
3. Poorly calked bounding angles
4. All of the above

3-2. What teat is used for the periodic watertight inspection of the engineroom?

1. Chalk
2. Visual
3. Water
4. Air

3-3. The schedule of Watertight Integrity Test and Inspections is issued by what activity?

1. NAVSEA
2. The ship builder
3. The Bureau of Ships
4. The type commander

3-4. On ships more than 12 years old, each compartment that requires an air test should be tested how often?

1. Every 6 mo
2. Every 12 mo
3. Every 3 mo
4. Every 18 mo

3-5. When a compartment is under an air test, what is the first action you should take to find the leak?

1. Listen for it
2. Apply soapsuds solution
3. Perform a light test
4. Fill the compartment with smoke

3-6. During tests for watertight integrity, a soap solution is often applied to joints and fittings for what purpose?

1. To indicate that the area has been tested
2. To seal up holes through which air leaks
3. To indicate the exact location of leaks
4. To clean them for further inspection

3-7. All caps for air test fittings replaced after the completion of tests are classified as

1. ZEBRA
2. X-RAY
3. YOKE
4. WILLIAM

3-8. At the completion of an air test, temporary closures are removed from overflows, air escapes and air vents in magazines and in fuel oil tanks.

1. True
2. False

Learning Objective: Recognize the major duties of a damage control watch.

3-9. The duties of a sounding and security control watch do NOT include which of the following actions.

1. Taking soundings of designated compartments
2. Inspecting watertight airports, hatches, doors, and other openings
3. Checking for leakage from firemain, fresh water, and other piping systems
4. Maintaining damage control closure log

3-10. On a damage control patrol watch, any hazardous conditions should be reported immediately to the

1. damage control assistant and engineer officer
2. engineer officer and damage control central
3. OOD and damage control central
4. OOD and engineer officer

Learning Objective: Identify a sounding tube and recognize practices used to take soundings.

3-11. A sounding tuba is usually constructed of what size pipe?

1. 1 in.
2. 2 in.
3. 1 1/2 in.
4. 1/2 in.

3-12. If a sounding tube extends above a deck, it normally will have what type of valve?

1. Gate
2. Ball
3. Check
4. Globe

3-13. Assume that a sounding tape shows one foot of liquid in a normally dry compartment. What action should you take first?

1. Wait until the next time you take soundings to see If the level has increased
2. Notify the main engineroom go that the level of liquid can be recorded
3. Pass the word about the liquid level to your relief
4. Notify the OOD and engineer officer immediately

3-14. You are removing a sounding tube cap and air escapes around the threads. What condition is indicated?

1. A defective cap
2. A normal compartment
3. A partially flooded compartment
4. A fully flooded compartment

Learning Objective: Point out principles and practices in reading ship's draft and inclination.

3-15. Which of the following statements describes calculation draft marks?

1. They are used to determine displacement and other properties of the ship for stability and damage control purposes
2. They are 6 in. high
3. They are marked on the hull with arabic numerals
4. They indicate the distance from the lowest projection of the hull to the waterline

3-16. Navigational draft marks greater than how q any feet are indicated by the last digit only?

1. 5 ft
2. 7 ft
3. 3 ft
4. 9 ft

3-17. Which of the following officers is authorized to exceed the limiting draft mark?

1. The damage control officer
2. The engineer officer
3. The executive officer
4. The commending officer

IN ANSWERING QUESTIONS 3-18 THROUGH 3-21, MATCH THE DRAFT DESCRIPTIONS IN COLUMN B WITH THE WITH DRAFT SYMBOLS IN COLUMN A. EACH RESPONSE MAY BE USED ONLY ONCE.

	A. DRAFT SYMBOLS	B. DESCRIPTIONS
3-18.	TF	1. Maximum draft (fresh water)
3-19.	F	2. Maximum draft, winter, North Atlantic (salt water)
3-20.	T	
3-21.	WNA	3. Maximum draft, tropical (fresh water)
		4. Maximum draft, tropical (salt water)

3-22. The remote draft gage provides information to damage control central relative to the draft of the ship at a predetermined point.

1. True
2. False

3-23. A permanent angle of heel taken on by a ship is described by whet term?

1. Trim
2. Roll
3. List
4. Heel

3-24. When the total weight of cargo and structure forward is greater than the weight aft, the ship is in what inclination?

1. Trimmed by the bow
2. Listing aft
3. Listing forward
4. Trimmed by the stern

IN ANSWERING QUESTION 3-25, REFER TO FIGURES 3-18 THROUGH 3-21 IN YOUR TEXTBOOK.

3-25. whAt clinometer indicates that a ship is trimmed 10° by the bow?

1. Type A
2. Type B
3. Type C
4. Type E

Learning Objective: Define fire and identify stages in the combustion process.

3-26. What is the definition of the fire point of a liquid fuel?

1. The lowest temperature at which the fuel gives off vapors that will burn when a flame or spark is applied
2. The lowest temperature to which the fuel must be heated to give off vapors that will burn without the application of a spark or flame
3. The temperature at which the fuel will continue to burn after it is ignited
4. The highest temperature at which the fuel gives off vapors that explode spontaneously

3-27. Spontaneous combustion of oil-soaked rags usually occurs at what temperature?

1. The fire point of the oil vapors
2. The lowest temperature at which the oil vapors will burn without a spark or flame as the ignition source
3. The lowest temperature at which the oil vapors will burn
4. A temperature between the flash and fire points of the oil vapor

---

Learning Objective: Classify fires according to type of combustible material.

3-28. The classification of a fire provides which of the following information?

1. The location of the fire
2. The manner in which the fire is to be extinguished
3. The speed with which the fire must be brought under control
4. The quantity of the burning substance

IN ANSWERING QUESTIONS 3-29 THROUGH 3-33, SELECT FROM COLUMN B THE FIRE CLASSIFICATION FOR THE COMBUSTIBLE MATERIAL IN COLUMN A. RESPONSES MAY BE USED MORE THAN ONCE.

	A. COMBUSTIBLE MATERIALS	B. CLASSES OF FIRE
3-29.	Electrical wiring and insulation	1. A
3-30.	Paper, wood, and mattresses	2. B
3-31.	Oils, greases, and fuels	3. C
3-32.	Magnesium, titanium, and sodium	4. D
3-33.	Paints, thinners, and solvents	

Learning Objective: Point at properties of the gases given off during the combustion proses.v.

IN ANSWERING QUESTIONS 3-34 THROUGH 3-37, SELECT FROM COLUMN B THE COMBUSTION GAS THAT HAS THE CHARACTERISTICS IN COLUMN A.

	A. CHARACTERISTICS	B. GASES
3-34.	Toxic and has odor of rotten eggs; explosive range is 4.3% to 46%	1. Carbon dioxide
3-35.	Colorless, odorless, and nontoxic; does not form an explosive	2. Hydrogen chloride
3-36.	Colorless, odorless tasteless, nonirritating, and toxic; explosive range is 12.5% to 74%	3. Carbon monoxide
3-37.	Colorless, nonflammable gas, soluble in water can be found in a mist form	4. Hydrogen sulfide

3-38. What percent of oxygen is normally present in the air.

1. 22%
2. 20.8%
3. 18%
4. 16.3%

Learning Objective: Describe the processes used to extinguish fires.

3-39. The fire triangle does NOT include which of the following components?

1. Fuel
2. Combustion
3. Heat
4. Oxygen

3-40. When you wet down burning wreckage and push it over the side of a ship, you remove what component(s) of the fire triangle?

1. Oxygen and heat
2. Heat only
3. Fuel only
4. Fuel and heat

3-41. A fire that travels from one compartment to another via an air shaft is being spread by what means?

1. Radiation
2. Conduction
3. Convection
4. Projection

A. Water
B. Foam
C. Dry Chemical
D. Carbon Dioxide ($C0_2$)
E. Halon 1301

Firs Extinguishing Agents
Figure 3A

IN ANSWERING QUESTIONS 3-42 THROUGH 3-47, REFER TO FIGURE 3A.

3-42. Which agent works by interrupting the chemical reaction of fuel and oxygen?

1. A
2. B
3. D
4. E

3-43. Which agent absorbs the most heat?

1. A
2. B
3. C
4. D

3-44. Which agent, used in fog form, smothers a fire by displacing oxygen?

1. A
2. C
3. D
4. E

3-45. Which agent forms a light-water film over flammable liquid surfaces?

1. A
2. B
3. C
4. D

3-46. Which agent can be used with AFFF to put a temporary screen between heat, oxygen, and fuel?

1. B
2. C
3. D
4. E

3-47. Which agent, when used in closed spaces, requires the operator to wear an OBA?

1. B
2. C
3. D
4. E

Learning Objective: Point out details of construction, installation, and operation of shipboard equipment and systems for fighting fires with water.

3-48. How many basic types of firemain systems can be found on naval ships?

1. Five
2. Two
3. Three
4. Six

3-49. What type of firemain system consists of two single fore-and-aft, cross-connected mains, installed in the same horizontal plane?

1. Single main
2. Horizontal loop
3. Vertical loop
4. Composite

3-50. What type of firemain system consists of two cross-connected single mains running fore and aft but separated both horizontally and vertically?

1. Vertical loop
2. Composite
3. Horizontal loop
4. Single main

3-51. When a section of firemain piping has been ruptured, you should restore temporary service by which of the following means?

1. Rig a system of cutout valves
2. Close the cutout valves and remove the damaged section
3. Rig a jumper line using hose flange adapters to make connections
4. All of the above

3-52. What is the major disadvantage of bypassing a rupture in the firemain system by connecting fire hose to two fireplugs?

1. The fireplugs to which the jumper line is connected cannot be used for firefighting
2. Making the repair takes more time than laying standby hoses from an undamaged main
3. Pressure must be reduced in the firemain system or the jumper will rupture
4. The jumper line hampers deck operation

3-53. In other than tropical waters, the firemain system should be flushed how often?

1. Weekly
2. Bimonthly
3. Monthly
4. Quarterly

3-54. The fireplugs on ships may have which of the following diameters?

1. 1 1/2 in. only
2. 1 1/4, 2 1/3, or 3 1/4 in.
3. 1 1/2 or 2 1/2 in.
4. 1 3/4, 2 3/4, or 3 3/4 in.

3-55. The maximum distance from each of two or more fireplugs to any point on a ship is how many feet for (a) smell ships and (b) large ships other then aircraft carriers?

1. (a)50 ft (b) 50 ft
2. (a) 50 ft (b) 100 ft
3. (a) 100 ft (b) 100 ft
4. (a) 50 ft (b) 50 ft

3-56. On aircraft carriers, whet is the maximum distance between each of two or more fireplugs and any point on the flight deck?

1. 25 ft
2. 50 ft
3. 100 ft
4. 150 ft

3-57. Depending on the age of a ship, fireplugs on weather decks are installed how far above the deck and in whet position?

1. 13 to 18 in.; outlets vertical
2. 13 to 18 in.; outlets horizontal
3. 5 to 6 ft; outlets vertical
4. 5 to 6 ft; outlets horizontal

3-58. To accommodate two lengths of 1 1/2-inch hose, fireplug outlets that are 2 1/2 inches in diameter are reduced by what means?

1. Wye gates
2. Reducer couplings
3. Double male couplings
4. Male-female couplings

3-59. Which of the following types of strainer is attached to fireplug outlets?

1. Disposable
2. Quick-cleaning
3. Self-cleaning
4. Each of the above

3-60. What minimum number ofstandard-length fire hoses will span the distance between a fireplug and a point 175 feet away?

1. One
2. Two
3. Three
4. Four

3-61. A double female hose coupling is used to make which of the following connections?

1. The female fittings of two lengths of fire hose
2. Two outlets of a wye gate
3. The female end of a 2 1/2-in. hose to a 1 1/2-in. diameter fireplug outlet
4. The male fittings of lengths of fire hose

3-62. A fire hose with a rubber lining will NOT be damaged if it is stowed with water in it.

1. True
2. False

3-63. Once a month, firehoses should be removed from stowage for which of the following reasons?

1. To check whether it contains moisture
2. To polish the bright work
3. To administer a hydrostatic pressure test
4. To restow it so that the folds will be changed

3-64. Low fire hose pressure is generally produced by which of the following causes?

1. Friction losses
2. A fire plug valve fully opened
3. A handle on a quick cleaning strainer in the closed position
4. Minimum head pressure

3-65. A fire nozzle is located 65 feet above a fire pump producing a water pressure of 120 psi. If there is no pressure loss due to friction, about how much pressure will be available?

1. 92 psi
2. 97 psi
3. 101 psi
4. 111 psi

IN ANSWERING QUESTIONS 3-66 THROUGH 3-68, REFER TO THE ALL-PURPOSE NOZZLE IN FIGURE 5-5 IN YOUR TEXTBOOK.

3-66. By turning the valve bridle until it is in the center position, you set the nozzle to discharge which of the following agents?

1. High-velocity fog
2. A solid stream of water
3. A mixture of high-velocity and low-velocity fog
4. Solid streams of water alternating with high-velocity fog at l-minute intervals

3-67. What must you do to adapt the nozzle to discharge low-velocity fog?

1. Insert a low-velocity fog head in the straight stream opening
2. Insert an applicator equipped with a low-velocity fog head in the straight stream opening
3. Remove the high-velocity tip from the fog outlet and insert it in the straight stream opening
4. Remove the high-velocity tip from the fog outlet and insert an applicator equipped with a low-velocity fog head

3-68. The nozzle is outfitted to produce what pattern(s)?

1. High-velocity fog and low-velocity fog only
2. Straight stream and low-velocity fog only
3. Straight stream and high-velocity fog only
4. Straight stream, high-velocity fog, and low-velocity fog